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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,968	01/10/2005	Hiroaki Kikuchi	09852/0202320-US0	4946
7278	7590	03/19/2007		
DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257			EXAMINER KOEHLER, CHRISTOPHER M	
			ART UNIT	PAPER NUMBER
			3726	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/19/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/520,968	KIKUCHI ET AL.	
	Examiner	Art Unit	
	Christopher M. Koehler	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,8,12 and 13 is/are rejected.
- 7) ☒ Claim(s) 2,4,7 and 9-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 3, 5, 8, 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Shusen et al (CN 1285249A (English translation accompanies this office action)).

Claim 1:

Shusen teaches a manufacturing method for forming a frame body that forms a metal frame body comprising the steps of ring rolling a metal to form a ring shaped member (figure 4), pressing and deforming the ring-shaped member in radial directions thereof (figure 6) to form a rectangular member, die forging the rectangular member in a mold to form a frame body (figure 7 and claim 1).

Claim 3:

Shusen teaches that when forming the rectangular member an insert is disposed inside the ring-shaped member (figure 6).

Claims 5 and 8:

Shusen teaches that the height of the pre-form, i.e. rectangular member is a critical factor in the process and that the height must be the height of one pre-form before it is inserted into the mold to be forged. Therefore if the rectangular member were to be of a height greater than one rectangular member, i.e. a plurality of frame bodies, the rectangular member would be cut at a height equivalent to the one frame

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body to be die forged separately (last paragraph on page 6-page 7 of supplied translation).

Claim 12:

Shusen teaches a manufacturing method for forming a frame body that fromse a metal frame body comprising ring rolling a metal to form a ring-shaped member (figure 4), pressing and deforming the ring-shaped member in first and second radial directions thereof (figure 6), wherein the second radial direction is generally perpendicular to the first radial direction (generally form a 90 degree angle) and die forging the rectangular member in a mold to form a frame body (figure 7).

Claim 13:

Shusen teaches a manufacturing method for a frame body that forms a metal frame body comprising ring rolling a metal to form a ring-shaped member (figure 4), pressing and deforming the ring-shaped member in first radial direction thereof to form a first side and in a second direction generally perpendicular to the first side to form a rectangular member (figure 6), and die forging the rectangular member in a mold to form a frame body (figure 7).

Allowable Subject Matter

3. Claims 2, 4, 7 and 9-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. The following is a statement of reasons for the indication of allowable subject matter:

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5. Regarding claims 2, 4, 7, 9 and 11, the prior art fails to explicitly teach that in the forming step the angle of the corner portion is made smaller than the prescribed angle in the frame body after die forging in combination with the other limitations of the claims.

6. Regarding claim 10, the prior art fails to explicitly teach that in forming the rectangular member a convexity which is convex towards an inside of the rectangular member is formed at a middle of a wall portion of the rectangular member by bending in combination with the other limitations of the claims.

Response to Arguments

7. Applicant's arguments filed 12/8/2006 have been fully considered but they are not persuasive.

8. Applicant argues that Shusen does not teach forming from a ring-shape into a rectangular shape via an intermediate rectangular shape. As can be found in the accompanying updated translation of the Shusen application (regrettably, portions of page 3 of Shusen were not included in the previous translation), Shusen teaches forming a ring shaped member and marking 4 angles (figure 4), the expanded hole ring with the markings on it is stretched (figure 5), a fixture is used specifically for making arcuate angles is shown in figure 6, and is subsequently die forged. See updated (accompanying) translation pages 11-12.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Koehler whose telephone number is (571) 272-3560. The examiner can normally be reached on Mon.-Fri. 7:30A-4:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CMK



DAVID P. BRYANT
SUPERVISORY PATENT EXAMINER

3/15/07